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ABSTRACT OF THE DISCLOSURE

A photodiode array comprises a semiconductor substrate formed with an array of a plurality of pn junction type photodiodes on a light incident surface side, the surface opposite from the incident surface in the semiconductor substrate being made of a (100) plane; a through hole, formed in an area held between the photodiodes, penetrating through the semiconductor substrate from the incident surface side to the opposite surface side; and a conductive layer extending from the incident surface to the opposite surface by way of a wall surface of the through hole; the through hole being formed by connecting a vertical hole part formed substantially perpendicular to the incident surface on the incident surface side, and a pyramidal hole part formed like a quadrangular pyramid on the opposite surface side to each other within the semiconductor substrate; the pyramidal hole part having a wall surface formed as a (111) plane.